6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R05-OAR-2020-0385; FRL-8826-01-R5]

Air Plan Approval; Michigan; Sulfur Dioxide Clean Data Determination for St. Clair

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to make a determination that the St. Clair sulfur dioxide (SO_2) nonattainment area has attained the 2010 primary SO_2 National Ambient Air Quality Standard (2010 SO_2 NAAQS). If finalized, this determination would suspend certain requirements for the nonattainment area for as long as the area continues to attain the 2010 SO_2 NAAQS.

DATES: Comments must be received on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2020-0385 at http://www.regulations.gov, or via email to blakley.pamela@epa.gov. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information

whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the **"FOR FURTHER INFORMATION CONTACT"** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Mary Portanova, Environmental Engineer, Control Strategies Section, Air Programs Branch (AR18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353-5954 portanova.mary@epa.gov. The EPA Region 5 office is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding Federal holidays and facility closures due to COVID-19.

SUPPLEMENTARY INFORMATION: Throughout this document whenever "we," "us," or "our" is used, we mean EPA.

I. Background.

The St. Clair area was designated nonattainment for the 2010 SO_2 NAAQS on July 12, 2016 (81 FR 45039), based on air quality modeling showing violations of the standard. The two SO_2-emitting facilities in the St. Clair area are DTE Energy-Belle River (Belle River plant) and DTE Energy-St. Clair (St. Clair plant), which are both coal-fired power plants. The nonattainment area consists of a portion of southeastern St. Clair County, Michigan, located northeast of Detroit. The nonattainment area shares a border with Ontario, Canada along the St. Clair River. (See the area's complete boundary description at 40 CFR 81.323).

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) was required to prepare a nonattainment State Implementation Plan (NA SIP) by March 12, 2018 to bring the St. Clair area into attainment by the attainment date of September 12, 2021, but EGLE did not submit a complete NA SIP for the St. Clair area by the March 12, 2018 deadline. On September 20, 2019 (84 FR 49462), EPA issued a finding of failure to submit (FFS) a SIP required for attainment of the 2010 SO_2 NAAQS.

EGLE has informed EPA that DTE intends to close the St. Clair plant in 2022, and use a new natural gas power plant, already under construction, to generate electric power in its place. This plant closure and replacement is expected to result in a large SO_2 emission reduction for the area, but the expected

SO_2 reductions would not occur in time to be a timely element of the required 2018 NA SIP for the St. Clair area. Nevertheless, the September 20, 2019 FFS resulted in the initiation of an 18-month clock toward imposition of sanctions for the state under CAA section 179, unless an approvable SO_2 SIP is submitted and deemed complete by EPA. (See 40 CFR 52.31(d)(5)). In addition, the FFS started a two-year clock by which EPA is required under CAA section 110(c) to promulgate a Federal Implementation Plan (FIP) for the area, unless the state submits and EPA approves a SIP for the area before that date.

In the meantime, EGLE obtained air quality monitoring data in the St. Clair area which had not been available before the St. Clair area was designated nonattainment. On July 24, 2020, EGLE submitted a request that EPA make a determination under the Clean Air Act (CAA) and EPA's Clean Data Policy, based on both local monitored air quality data and a new dispersion modeling analysis, that the St. Clair nonattainment area has attained the 2010 SO_2 NAAQS (Clean Data Determination). Approval of EGLE's request would suspend the requirement for the state to submit certain planning elements otherwise required under CAA section 172(c) for a NA SIP for the St. Clair area, and suspend the sanctions and FIP clocks, for so long as the area continues to attain the 2010 SO_2 NAAQS. EGLE would still be required to submit an emissions inventory (EI) required by CAA section 172(c)(3) and a nonattainment new source review (NNSR) program required by CAA section 172(c)(5), in order to avoid sanctions.

EGLE submitted the St. Clair area's EI and NNSR verification to EPA on June 30, 2021.

II. Clean Data Determinations.

Following enactment of the CAA Amendments of 1990, EPA discussed its interpretation of the requirements for implementing the NAAQS in the General Preamble for the Implementation of title I of the CAA Amendments of 1990 (General Preamble), 57 FR 13498, 13564 (April 16, 1992). In 1995, based on the interpretation of CAA sections 171, 172, and 182 in the General Preamble, EPA set forth what has become known as its "Clean Data Policy" for the 1-hour ozone NAAQS. Under the Clean Data Policy, for a nonattainment area that can demonstrate attainment of the standard before implementing CAA nonattainment measures, EPA interprets the requirements of the CAA that are specifically designed to help an area achieve attainment, such as attainment demonstrations, implementation of reasonably available control measures, including reasonably available control technology (RACM/RACT), reasonable further progress (RFP) demonstrations, emissions limitations and control measures as necessary to provide for attainment, and contingency measures, to be suspended for so long as air quality continues to meet the standard. See the May 10, 1995 memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, entitled, "Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment areas Meeting the Ozone National Ambient Air Quality Standard."

In an April 23, 2014 memorandum from Steve Page, Director of the EPA's Office of Air Quality Planning and Standards, to the EPA Air Division Directors entitled, "Guidance for 1-hr SO_2 Nonattainment Area SIP Submissions" (2014 SO_2 Nonattainment Area Guidance), EPA provides guidance and a rationale for the application of the Clean Data Policy to the 2010 1-hour primary SO_2 NAAQS.

A state may notify EPA that it believes a nonattainment area is attaining the 2010 SO_2 NAAQS and request a clean data determination under EPA's Clean Data Policy. EPA will determine whether the area has attained the 2010 SO_2 NAAQS based on available information, including available air quality monitoring data and air quality dispersion modeling information for the affected area. If the determination of attainment is granted, then requirements for the area such as a nonattainment SIP submittal or reasonable further progress measures are suspended for so long as the area continues to attain the NAAQS. Provided the area has submitted a complete EI and NNSR program, sanctions for failing to timely submit a SIP are also suspended for so long as the area remains in attainment.

However, the suspension of the obligations to submit attainment planning related SIPs is only appropriate where the area remains in attainment of the NAAQS. EPA is proposing to require EGLE to submit annual statements by July 1 to EPA, to address whether the St Clair area has continued to attain the 2010 SO_2 NAAQS. EPA expects that these statements could include

such information as available air quality monitoring data or an assessment of changes in facility emissions or operations and whether these changes warrant updated modeling. If EPA does not receive credible information indicating that the area continues to attain the SO_2 NAAQS, EPA will propose to rescind the St. Clair area's clean data determination, the finalization of which would lift the suspension of its attainment planning requirements and would reinstate the sanctions and FIP clocks with their original deadlines.

The determination of attainment under the Clean Data Policy does not serve to alter the area's nonattainment designation. Clean data determinations are not redesignations to attainment. For EPA to redesignate an area to attainment, the area must meet the requirements of CAA section 107(d)(3) and demonstrate maintenance as required by CAA section 175A.

III. Analysis of EGLE's Request.

EGLE's July 24, 2020 request for a clean data determination included local monitoring data and a dispersion modeling analysis for the St. Clair nonattainment area. The 2014 SO_2 Nonattainment Area Guidance states that when air agencies provide monitoring and/or modeling to support clean data determinations, the monitoring data provided by the state should follow EPA's "SO_2 NAAQS Designations Source-Oriented Monitoring Technical Assistance Document" (SO_2 Monitoring TAD) and the modeling provided by the state should follow EPA's "SO_2 NAAQS

Designations Modeling Technical Assistance Document" (SO_2 Modeling TAD).

The Monitoring TAD was provided by EPA to assist states in siting monitors to characterize ambient air quality impacted by significant SO_2 sources, with the goal to identify peak SO_2 concentrations attributable to those sources. Collaboration with other stakeholders such as affected industry was encouraged in the Monitoring TAD. The Monitoring TAD suggests that existing industry monitoring operations could be found to meet the necessary requirements to produce data of appropriate quality for comparison to the NAAQS. Industrial monitors should be appropriately sited and operated in a manner largely equivalent to those monitors operated elsewhere in the State and Local Air Monitoring Stations (SLAMS) network, meeting applicable criteria in 40 CFR part 58, appendices A, C, and E and reporting their data to the Air Quality Subsystem (AQS).

EGLE's July 24, 2020 submittal included three years of monitoring data from two industrial monitors located in the St. Clair nonattainment area, near the power plants. DTE installed the two SO_2 monitors in the St. Clair nonattainment area in 2016 to evaluate SO_2 impacts from the two facilities. The monitors were sited using dispersion modeling to help identify the locations of predicted maximum SO_2 concentrations. Considering the monitor siting guidance in the Monitoring TAD, EPA believes that these monitors' locations adequately represent the locations of potential maximum SO_2 impacts from the two power

plants. One monitor, known as the Remer monitor, is sited near the St. Clair River, between and slightly north of the two power plants, about one kilometer (km) from each plant. Previously modeled maximum SO_2 concentrations have been predicted at or near this location. The other monitor, known as the Mills monitor, is sited 3 km west of the Belle River plant, so that it can capture the worst-case combined impacts when winds are blowing from the St. Clair plant toward the Belle River plant.

EPA reviewed the ambient air monitoring data for the 2017-2019 period, which were the three most recent full calendar years of data available. Ambient and quality assurance data for these two monitoring sites are recorded in EPA's AQS database. EGLE and EPA have reviewed the data and have determined that this data meets completeness and data quality indicators confirm that the data is suitable to be used in support of a clean data determination for the St. Clair area.

The data cited by EGLE in its request show attainment of the 2010 SO_2 NAAQS at both monitors for the 2017-2019 time period, with three-year average 99^{th} percentile daily maximum 1-hour concentrations (design values) of 54 and 45 parts per billion (ppb), which are below the 2010 SO_2 NAAQS of 75 ppb. Data for 2020 indicate that the monitors have continued to show attainment. Table 1 shows the 2017-2020 SO_2 monitoring results for the St. Clair area monitors.

Table 1. 2017-2020 Monitored SO_2 Values in the St. Clair Area

Monitor	Annual 99th Percentile (ppb)				**2017-2019 Design Value (ppb)**	**2018-2020 Design Value (ppb)**
	2017	2018	2019	2020		
Mills Monitor	46	50	40	29	**45**	**40**
Remer Monitor	51	65	45	25	**54**	**45**

EPA also reviewed the dispersion modeling analysis for the St. Clair area which EGLE submitted on July 24, 2020. The SO_2 Modeling TAD outlines modeling approaches for SO_2 NAAQS attainment status designations and states that, for the purposes of modeling to characterize air quality for use in SO_2 designations, EPA recommends using a minimum of the most recent three years of actual emissions data and concurrent meteorological data to allow the modeling to simulate what a monitor would observe.

EGLE's analysis followed the Modeling TAD and modeled the impacts of the Belle River and St. Clair plants in the St. Clair nonattainment area. EGLE used the actual 2017-2019 hourly SO_2 emissions for the Belle River and St. Clair plants as measured by continuous emissions monitor (CEM) data. EGLE also characterized the buildings at the two plants using the AERMOD component BPIPPRM, to address building downwash. There were no additional nearby sources that were expected to produce a significant SO_2 concentration gradient in the nonattainment area.

To model the St. Clair nonattainment area, EGLE used EPA's AERMOD model, version 19191, with meteorological data for 2017-

2019 from the Oakland County International Airport (Pontiac), located 75 km to the west of the St. Clair plants. This meteorological data set is considered to be representative of the St. Clair area. The area was modeled as rural, based on local land use characteristics. Terrain information was included in the modeling analysis. The nonattainment area is flat and mostly residential or agricultural. The river valley is not deep, although some wind channeling could occur. The geographical and topographical features of the area are not considered to significantly impact air pollution transport. The St. Clair modeling analysis used a nested receptor grid with resolution from 50 meters near the facilities to 100 meters in the central portion, and then 250 meters to the edge of the modeling domain, 10 km from the power plants.

For a background concentration for the modeling analysis, EGLE used monitored SO_2 data from Michigan's SO_2 monitor in Port Huron, located 21 km to the north of the St. Clair plants. The Port Huron monitor has an SO_2 design value of 67 ppb for 2017-2019. EGLE determined its background concentration using a temporally varying approach to characterize background SO_2 emissions, based on the 99^{th} percentile monitored concentrations by season and hour of day. In this analysis, EGLE used data measured when winds were blowing from wind direction sectors which were chosen to avoid double-counting emissions from the St. Clair and Belle River plants and to avoid overestimating impacts from sources which are located in Canada, 3-5 km east of

Port Huron but 15-20 km from the St. Clair area. The Modeling TAD provides for this approach. At such distances, the Canadian sources are not expected to provide a significant concentration gradient in the St. Clair area. The modeling analysis' results match well with the monitored values near the St. Clair plants, which suggests that the modeling analysis is not missing significant additional ambient contributions at those locations. Therefore, EPA concurs with the background values EGLE used in its analysis. The background concentrations for the St. Clair modeling analysis were determined to vary from 1.3 to 6.5 ppb, with an average value of 2.4 ppb.

The state's modeling resulted in a three-year maximum predicted 99^{th} percentile daily maximum 1-hour concentration of 64.4 ppb, including background. This design value was predicted at a receptor located very near the St. Clair plant. As the predicted design value is below the 2010 SO_2 NAAQS of 75 ppb, the state's modeling demonstrates attainment of the 2010 SO_2 NAAQS.

EGLE's modeling results for receptors placed at the two SO_2 monitors' locations matched well with the actual monitored design values. The model's predicted design value at the Remer monitor location was 47.7 ppb, compared to the monitored design value of 45 ppb, and the model's predicted design value at the Mills monitor location was 52.7 ppb, compared to the monitored design value of 54 ppb. The location of the maximum modeled 99th percentile concentration was less than half a kilometer from the Remer monitor, which lends support to EPA's expectation

that the Remer monitor is located in the area of expected maximum concentrations. Other areas of predicted high concentrations were at approximately the same distance to the northwest and west of the power plants as the Mills monitor, again lending support to EPA's expectation that the Mills monitor location is also representative of areas of high expected concentrations.

After reviewing EGLE's July 24, 2020 submittal, EPA proposes to find that the St. Clair area has attained the 2010 SO_2 NAAQS and satisfies the requirements of the Clean Data Policy.

IV. What Action is EPA Taking?

EPA is proposing to approve EGLE's request for a Clean Data Determination for the St. Clair nonattainment area in St. Clair County, Michigan. Finalizing this determination would suspend the requirements for EGLE to submit an attainment demonstration and other associated nonattainment planning requirements for so long as the St. Clair nonattainment area continues to attain the 2010 SO_2 NAAQS. This proposed action is consistent with EPA's long-held interpretation of CAA requirements.

Finalizing this action would not constitute a redesignation of the St. Clair area to attainment of the 2010 SO_2 NAAQS under section 107(d)(3) of the CAA. The St. Clair area will remain designated nonattainment for the 2010 SO_2 NAAQS until such time as EPA determines that the area meets the CAA requirements for

redesignation to attainment and takes action to redesignate the area.

V. Statutory and Executive Order Reviews.

This action proposes to make a clean data determination for the St. Clair area for the 2010 SO_2 NAAQS based on air quality data which would result in the suspension of certain Federal requirements and does not impose any additional requirements. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Sulfur oxides.

Dated: August 9, 2021.

Cheryl Newton,
Acting Regional Administrator, Region 5.

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